
Archives of Virology

Continuation of
Archiv für die gesamte Virusforschung

Edited by
E. Norrby, Stockholm
C. Scholtissek, Giessen
G. J. Todaro, Bethesda, Md.
D. A. J. Tyrrell, Harrow
J. Vilček, New York, N.Y. (Editor-in-Chief)

Vol. 53, 1977

ISSN 0304-8608

Springer-Verlag
Wien New York



Archives of Virology

Continuation of

Archiv für die gesamte Virusforschung

Editorial Advisory Board

- | | |
|--------------------------------------|--|
| S. Baron, Galveston, Tex. | M. B. A. Oldstone, La Jolla, Calif. |
| C. Basílico, New York, N. Y. | M. N. Oxman, San Diego, Calif. |
| J. Casals, New Haven, Conn. | U. Pettersson, Uppsala |
| R. M. Chanock, Bethesda, Md. | W. Plowright, London |
| P. D. Cooper, Canberra | J. S. Porterfield, London |
| E. De Clercq, Leuven | C. R. Pringle, Glasgow |
| E. De Maeyer, Orsay | F. Rapp, Hershey, Pa. |
| W. Doerfler, Köln | W. E. Rawls, Hamilton, Ontario |
| A. Flamand, Orsay | B. Roizman, Chicago, Ill. |
| R. M. Franklin, Basel | J. Sambrook, Cold Spring Harbor, N. Y. |
| H. Hanafusa, New York, N. Y. | W. Schäfer, Tübingen |
| D. H. Harter, Chicago, Ill. | D. I. H. Simpson, St. Albans, Herts. |
| H. zur Hausen, Erlangen | J. J. Skehel, London |
| B. Hirt, Lausanne | F. Steck, Bern |
| A. S. Huang, Boston, Mass. | E. J. Stott, Compton, Berks. |
| R. Jaenisch, San Diego, Calif. | A. Sugiura, Tokyo |
| W. F. H. Jarrett, Glasgow | J. Svoboda, Praha |
| W. K. Joklik, Durham, N. C. | H. M. Temin, Madison, Wis. |
| M. Kitaoka, Tokyo | A. Vaheri, Helsinki |
| H.-D. Klenk, Giessen | V. Vonka, Praha |
| D. M. Livingston, Boston, Mass. | A. P. Waterson, London |
| K. Maramorosch, New Brunswick, N. J. | R. Weil, Genève |
| M. Matumoto, Tokyo | K. E. Weiss, Onderstepoort |
| V. ter Meulen, Würzburg | H. A. Wenner, Kansas City, Mo. |
| F. A. Murphy, Atlanta, Ga. | D. O. White, Parkville, Victoria |
| M. Mussgay, Tübingen | V. M. Zhdanov, Moscow |
| N. Nathanson, Baltimore, Md. | |

Editorial Assistant: F. Heinz, Wien

The exclusive copyright for all languages and countries, including the right for photo-mechanical and any other reproductions including microform is transferred to the publisher.

Alle Rechte, einschließlich das der Übersetzung in fremde Sprachen und das der photo-mechanischen Wiedergabe oder einer sonstigen Vervielfältigung, auch in Mikroform, vorbehalten.

© 1977 by Springer-Verlag / Wien

Contents: Vol. 53

No. 1—2

Sazonov, A. A., Lvov, D. K., Webster, R. G., Sokolova, T. V., Braude, N. A., Portyanko, N. V.: Isolation of an Influenza Virus, Similar to A/Port Chalmers/1/73 (H3N2) from a Common Murre at Sakhalin Island in U.S.S.R. (Strain A/Common Murre/Sakhalin/1/74)	1
Parfanovich, M. I., Kasak, N. P., Baranov, A. E., Napastnikova, T. L., Nikolskaya, T. A., Zhdanov, V. M.: Isolation and Characterisation of Oncornavirus from Primary Cultures of Tissues from Cattle with Leukemia	9
Wolstenholme, J., Woodward, C. G., Burgoyne, R. D., Stephen, J.: Vaccinia Virus Cytotoxin.	25
Abraham, A. A., Inverso, Karen: Isolation and Characterization of an Echovirus, Intratypic Variant of Echovirus 33	39
Lemercier, G., Neveu, D., Morel, J., Fontanges, R.: La Réponse Immunitaire Locale au Cours de la Grippe Expérimentale de la Souris: Immunoglobulines, Anticorps Spécifiques et Réponse Anamnétique des Sécrétions Bronchiques	45
Local Immune Response in Mouse Experimental Airborne Influenza: Immunoglobulin Concentrations, Antibody Levels of Immunoglobulin Classes and Anamnestic Response in Bronchial Washings	
Rajčáni, J., Čiampor, F., Sabó, A., Libiková, H., Rosenbergová, M.: Activation of Latent Herpesvirus Hominis in Explants of Rabbit Trigeminal Ganglia: the Influence of Immune Serum	55
Szmigielski, S., Luczak, M., Janiak, M., Kobus, M., Laskowska, B., De Clercq, E., De Somer, P.: <i>In vitro</i> and <i>in vivo</i> Inhibition of Virus Multiplication by Microwave Hyperthermia	71
Skuratovskaya, I. N., Strokovskaya, L. I., Zhrebtsova, E. N., Gudzhorban, A. P.: Supercoiled DNA of Nuclear Polyhedrosis Virus of <i>Galleria mellonella</i> L.	79
Tanaka, J., Ogura, H., Hatano, M.: Cellular Proteases Increased in Paramyxovirus (Sendai Virus) Carrier Cells Possibly Responsible for Enhanced Formation of Cowpox Virus-Specific Cell Surface Antigen	87
Boldogh, I., Gönczöl, Éva, Gärtner, L., Váczi, G.: Expression of the Human Cytomegalovirus Genome in Mouse Cells and in Human-Mouse Heterokaryons	101
Dinowitz, M., Lindell, T. J., O'Malley, A.: Altered Sensitivity of Rous Sarcoma Virus Transformed Cells to Inhibition of RNA Synthesis by α -Amanitin	109
Armen, R. C., Evermann, J. F., Truant, A. L., Laughlin, C. A., Hallum, J. V.: Temperature-Sensitive Mutants of Measles Virus Produced from Persistently Infected HeLa Cells	121
Tan, K. B.: The Effect of Arginine Deprivation on DNA, Thymidine Kinase and DNA Polymerase Synthesis in Simian Virus 40-Infected Monkey Kidney Cells	133

Pauli, G., Ludwig, H.: Immunoprecipitation of Herpes Simplex Virus Type 1 Antigens with Different Antisera and Human Cerebrospinal Fluids	139
--	-----

Brief Reports

Imanishi, J., Oishi, K., Kishida, T., Negoro, Y., Iizuka, M.: Effects of Interferon Preparations on Rabbit Corneal Xenograft	157
Nishigori, H., Nishimura, C.: Failure of Poxvirus Replication in the Presence of an Inhibitor of Nucleolar RNA Synthesis	163
Šmíd, B., Valíček, L., Nečas, O.: Freeze-Etching Observations on Infectious Bovine Rhinotracheitis Virus in the Nucleus of Bovine Kidney Cells	167

No. 3

Janout, V., Uvizi, M.: Immunological Potency of a Subunit Influenza Vaccine in Adults	171
Schmitz, H., Kampa, D., Doerr, H. W., Luthardt, T., Hillemanns, H. G., Würtele, A.: IgM Antibodies to Cytomegalovirus During Pregnancy	177
McNulty, M. S., Gowans, E. J., Louzã, A. C., Fraser, G.: An Electron Microscopic Study of MDBK Cells Persistently Infected With Newcastle Disease Virus	185
Morita, M., Aoyama, Y., Arita, M., Amano, H., Yoshizawa, H., Hashizume, S., Komatsu, T., Tagaya, I.: Comparative Studies of Several Vaccinia Virus Strains by Intrathalamic Inoculation Into Cynomolgus Monkeys	197
Hashimoto, K., Suzuki, K., Simizu, B.: Maturation Defect of a Temperature-Sensitive Mutant of Western Equine Encephalitis Virus	209
Holý, J., Hrodek, O., Šrajer, J.: Herpesvirus Group Antibodies in Children With Hodgkin's Disease	221
Sørensen, K. J.: A Comparative Electrophoretic Examination of Swine Vesicular Disease Virus and Coxsackie B5 Virus	235
Bergoin, M., Guelpa, B.: Dissolution des Inclusions du Virus de la Polyédrose Nucléaire du Diptère <i>Tipula paludosa</i> MEIG. Etude Ultrastructurale du Virion	243
Dissolution of Polyhedra of the Nuclear Polyhedrosis Virus of the Leather-jacket <i>Tipula paludosa</i> MEIG. Ultrastructural Study of the Virion	

Brief Reports

Roubal, J.: Cytosine-Arabinoside Does Not Inhibit Incorporation of ^3H -Thymidine in Herpes Simplex Virus Transformed Cells	255
Blaskovic, P., Zalan, E., Rohoman, K., Pukitis, Dzidra: Comparison Between Conventional Systems and a Newer System of Combined Cultures for Isolation of Influenza Viruses	261
Fraňková, Věra, Jirásek, A., Tůmová, Běla: Type A Influenza: Postmortem Virus Isolations From Different Organs in Human Lethal Cases	265

Sato, M., Maeda, N., Yoshida, H., Urade, M., Saito, S., Miyazaki, T., Shibata, T., Watanabe, M.: Plaque Formation of Herpes Virus Hominis Type 2 and Rubella Virus in Variants Isolated From the Colonies of BHK21/WI-2 Cells Formed in Soft Agar	269
Evermann, J. F., Burnstein, T.: Hamster Brain Tumor Cells Persistently Infected With Measles-Subacute Sclerosing Panencephalitis Virus	275

No. 4

Miura, T., Kitaoka, M.: Viruses Isolated From Bats in Japan	281
Thouless, M. E., Bryden, A. S., Flewett, T. H., Woode, G. N., Bridger, J. C., Snodgrass, D. R., Herring, J. A.: Serological Relationships Between Rotaviruses From Different Species as Studied by Complement Fixation and Neutralization	287
Terry, G. M.: Host Induced Modifications of Newcastle Disease Virus Virion Polypeptides	295
Westaway, E. G., McKimm, Jennifer L., McLeod, Leonie G.: Heterogeneity Among Flavivirus Proteins Separated in Slab Gels	305
Collins, Arlene R., Flanagan, T. D.: Interferon Production and Response to Exogenous Interferon in Two Cell Lines of Mouse Brain Origin Persistently Infected With Sendai Virus	313
Höglund, S., Moreno-López, J., Morein, B.: Components of Parainfluenza-3-Virus, SLP-Strain, Reacting in Assays of Cell-Mediated Immunity in Cattle	323
Desselberger, U.: Preparation-Conditioned Changes of the Antigenicity of Influenza Virus Neuraminidases	335

Listed in Current Contents

Author Index

- Abraham, A. A., Inverso, Karen: Isolation and Characterization of an Echovirus, Intratypic Variant of Echovirus 33. 39.
- Amano, H. s. Morita, M.
- Aoyama, Y. s. Morita, M.
- Arita, M. s. Morita, M.
- Armen, R. C., Evermann, J. F., Truant, A. L., Laughlin, C. A., Hallum, J. V.: Temperature-Sensitive Mutants of Measles Virus Produced from Persistently Infected HeLa Cells. 121.
- Baranov, A. E. s. Parfanovich, M. I.
- Bergoin, M., Guelpa, B.: Dissolution des Inclusions du Virus de la Polyédrose Nucléaire du Diptère *Tipula paludosa* MEIG. Etude Ultrastructurale du Virion. — Dissolution of Polyhedra of the Nuclear Polyhedrosis Virus of the Leatherjacket *Tipula paludosa* MEIG. Ultrastructural Study of the Virion. 243.
- Blaskovic, P., Zalan, E., Rohoman, K., Pukitis, Dzidra: Comparison Between Conventional Systems and a Newer System of Combined Cultures for Isolation of Influenza Viruses. (Brief Report) 261.
- Boldogh, I., Gönczöl, Éva, Gärtner, L., Váczi, G.: Expression of the Human Cytomegalovirus Genome in Mouse Cells and in Human-Mouse Heterokaryons. 101.
- Braude, N. A. s. Sazonov, A. A.
- Bridger, J. C. s. Thouless, M. E.
- Bryden, A. S. s. Thouless, M. E.
- Burgoyne, R. D. s. Wolstenholme, J.
- Burnstein, T. s. Evermann, J. F.
- Čiampor, F. s. Rajčáni, J.
- Collins, Arlene R., Flanagan, T. D.: Interferon Production and Response to Exogenous Interferon in Two Cell Lines of Mouse Brain Origin Persistently Infected With Sendai Virus. 313.
- De Clercq, E. s. Szmigielski, S.
- De Somer, P. s. Szmigielski, S.
- Desselberger, U.: Preparation-Conditioned Changes of the Antigenicity of Influenza Virus Neuraminidases. 335.
- Dinowitz, M., Lindell, T. J., O'Malley, A.: Altered Sensitivity of Rous Sarcoma Virus Transformed Cells to Inhibition of RNA Synthesis by α -Amanitin. 109.
- Doerr, H. W. s. Schmitz, H.
- Evermann, J. F., Burnstein, T.: Hamster Brain Tumor Cells Persistently Infected With Measles-Subacute Sclerosing Panencephalitis Virus. (Brief Report) 275.
- Evermann, J. F. s. Armen, R. C.
- Flanagan, T. D. s. Collins, Arlene R.
- Flewett, T. H. s. Thouless, M. E.
- Fontanges, R. s. Lemerrier, G.
- Fraňková, Věra, Jirásek, A., Tůmová, Běla: Type A Influenza: Postmortem Virus Isolations From Different Organs in Human Lethal Cases. (Brief Report) 265.
- Fraser, G. s. McNulty, M. S.
- Gärtner, L. s. Boldogh, I.
- Gönczöl, Éva s. Boldogh, I.
- Gowans, E. J. s. McNulty, M. S.
- Gudz-Gorban, A. P. s. Skuratovskaya, I. N.
- Guelpa, B. s. Bergoin, M.
- Hallum, J. V. s. Armen, R. C.
- Hashimoto, K., Suzuki, K., Simizu, B.: Maturation Defect of a Temperature-Sensitive Mutant of Western Equine Encephalitis Virus. 209.
- Hashizume, S. s. Morita, M.
- Hatano, M. s. Tanaka, J.
- Herring, J. A. s. Thouless, M. E.
- Hillemanns, H. G. s. Schmitz, H.
- Höglund, S., Moreno-López, J., Morein, B.: Components of Parainfluenza-3 Virus, SLP-Strain, Reacting in Assays of Cell-Mediated Immunity in Cattle. 323.
- Holý, J., Hrodek, O., Šrajer, J.: Herpesvirus Group Antibodies in Children With Hodgkin's Disease. 221.
- Hrodek, O. s. Holý, J.
- Iizuka, M. s. Imanishi, J.
- Imanishi, J., Oishi, K., Kishida, T., Negoro, Y., Iizuka, M.: Effects of Interferon Preparations on Rabbit Corneal Xenograft. (Brief Report) 157.
- Inverso, Karen s. Abraham, A. A.
- Janiak, M. s. Szmigielski, S.
- Janout, V., Uvzl, M.: Immunological Potency of a Subunit Influenza Vaccine in Adults. 171.
- Jirásek, A. s. Fraňková, Věra.

- Kampa, D. s. Schmitz, H.
 Kasak, N. P. s. Parfanovich, M. I.
 Kishida, T. s. Imanashi, J.
 Kitaoka, M. s. Miura, T.
 Kobus, M. s. Szmigielski, S.
 Komatsu, T. s. Morita, M.
- Laskowska, B. s. Szmigielski, S.
 Laughlin, C. A. s. Armen, R. C.
 Lemercier, G., Neveu, D., Morel, J., Fontanges, R.: La Réponse Immunitaire Locale au Cours de la Grippe Expérimentale de la Souris: Immunoglobulines, Anticorps Spécifiques et Réponse Anamnétique des Sécrétions Bronchiques. — Local Immune Response in Mouse Experimental Airborne Influenza: Immunoglobulin Concentrations, Antibody Levels of Immunoglobulin Classes and Anamnestic Response in Bronchial Washings. 45.
- Libiková, H. s. Rajčáni, J.
 Lindell, T. J. s. Dinowitz, M.
 Loužá, A. C. s. McNulty, M. S.
 Luczak, M. s. Szmigielski, S.
 Ludwig, H. s. Pauli, G.
 Luthardt, T. s. Schmitz, H.
 Lvov, D. K. s. Sazonov, A. A.
- McKimm, Jennifer L. s. Westaway, E. G.
 McLeod, Leonie G. s. Westaway, E. G.
 McNulty, M. S., Gowans, E. J., Loužá, A. C., Fraser, G.: An Electron Microscopic Study of MDBK Cells Persistently Infected With Newcastle Disease Virus. 185.
- Maeda, N. s. Sato, M.
 Miura, T., Kitaoka, M.: Viruses Isolated From Bats in Japan. 281.
- Miyazaki, T. s. Sato, M.
 Morein, B. s. Höglund, S.
 Morel, J. s. Lemercier, G.
 Moreno-López, J. s. Höglund, S.
 Morita, M., Aoyama, Y., Arita, M., Amano, H., Yoshizawa, H., Hashizume, S., Komatsu, T., Tagaya, I.: Comparative Studies of Several Vaccinia Virus Strains by Intrathalamic Inoculation Into Cynomolgus Monkeys. 197.
- Napastnikova, T. L. s. Parfanovich, M. I.
 Nečas, O. s. Šmid, B.
 Negoro, Y. s. Imanishi, J.
 Neveu, D. s. Lemercier, G.
 Nikolskaya, T. A. s. Parfanovich, M. I.
- Nishigori, H., Nishimura, C.: Failure of Pox-virus Replication in the Presence of an Inhibitor of Nucleolar RNA Synthesis. (Brief Report) 163.
- Nishimura, C. s. Nishigori, H.
- Ogura, H. s. Tanaka, J.
 Oishi, K. s. Imanishi, J.
 O'Malley, A. s. Dinowitz, M.
- Parfanovich, M. I., Kasak, N. P., Baranov, A. E., Napastnikova, T. L., Nikolskaya, T. A., Zhdanov, V. M.: Isolation and Characterization of Oncornavirus from Primary Cultures of Tissues from Cattle with Leukemia. 9.
- Pauli, G., Ludwig, H.: Immunoprecipitation of Herpes Simplex Virus Type 1 Antigens with Different Antisera and Human Cerebrospinal Fluids. 139.
- Portyanko, N. V. s. Sazonov, A. A.
 Pukitis, Dzidra s. Blaskovic, P.
- Rajčáni, J., Čiampor, F., Sabó, A., Libiková, H., Rosenbergová, M.: Activation of Latent Herpesvirus Hominis in Explants of Rabbit Trigeminal Ganglia: the Influence of Immune Serum. 55.
- Rohoman, K. s. Blaskovic, P.
 Rosenbergová, M. s. Rajčáni, J.
 Roubal, J.: Cytosine-Arabinoside Does Not Inhibit Incorporation of ³H-Thymidine in Herpes Simplex Virus Transformed Cells. (Brief Report) 255.
- Sabó, A. s. Rajčáni, J.
 Saito, S. s. Sato, M.
 Sato, M., Maeda, N., Yoshida, H., Urade, M., Saito, S., Miyazaki, T., Shibata, T., Watanabe, M.: Plaque Formation of Herpes Virus Hominis Type 2 and Rubella Virus in Variants Isolated From the Colonies of BHK 21/WI-2 Cells Formed in Soft Agar. (Brief Report) 269.
- Sazonov, A. A., Lvov, D. K., Webster, R. G., Sokolova, T. V., Braude, N. A., Portyanko, N. V.: Isolation of an Influenza Virus, Similar to A/Port Chalmers/1/73 (H3N2) from a Common Murre at Sakhalin Island in U.S.S.R. (Strain A/Common Murre/Sakhalin/1/74). 1.

- Schmitz, H., Kampa, D., Doerr, H. W., Luthardt, T., Hillemanns, H. G., Würtele, A.: IgM Antibodies to Cytomegalovirus During Pregnancy. 177.
- Shibata, T. s. Sato, M.
- Simizu, B. s. Hashimoto, K.
- Skuratovskaya, I. N., Strokovskaya, L. I., Zherebtsova, E. N., Gudz-Gorban, A. P.: Supercoiled DNA of Nuclear Polyhedrosis Virus of *Galleria mellonella* L. 79.
- Šmid, B., Valiček, L., Nečas, O.: Freeze-Etching Observations on Infectious Bovine Rhinotracheitis Virus in the Nucleus of Bovine Kidney Cells. (Brief Report) 167.
- Snodgrass, D. R. s. Thouless, M. E.
- Sokolova, T. V. s. Sazonov, A. A.
- Sørensen, K. J.: A Comparative Electrophoretic Examination of Swine Vesicular Disease Virus and Coxsackie B 5 Virus. 235.
- Šrajer, J. s. Holý, J.
- Stephen, J. s. Wolstenholme, J.
- Strokovskaya, L. I. s. Skuratovskaya, I. N.
- Suzuki, K. s. Hashimoto, K.
- Szmigielski, S., Luczak, M., Janiak, M., Kobus, M., Laskowska, B., De Clercq, E., De Somer, P.: *In vitro* and *in vivo* Inhibition of Virus Multiplication by Microwave Hyperthermia. 71.
- Tagaya, I. s. Morita, M.
- Tan, K. B.: The Effect of Arginine Deprivation on DNA, Thymidine Kinase and DNA Polymerase Synthesis in Simian Virus 40-Infected Monkey Kidney Cells. 133.
- Tanaka, J., Ogura, H., Hatano, M.: Cellular Proteases Increased in Paramyxovirus (Sendai Virus) Carrier Cells Possibly Responsible for Enhanced Formation of Cowpox Virus-Specific Cell Surface Antigen. 87.
- Terry, G. M.: Host Induced Modifications of Newcastle Disease Virus Virion Polypeptides. 295.
- Thouless, M. E., Bryden, A. S., Flewett, T. H., Woode, G. N., Bridger, J. C., Snodgrass, D. R., Herring, J. A.: Serological Relationships Between Rotaviruses From Different Species as Studied by Complement Fixation and Neutralization. 287.
- Truant, A. L. s. Armen, R. C.
- Tůmová, Běla s. Fraňková, Věra.
- Urade, M. s. Sato, M.
- Uvřzl, M. s. Janout, V.
- Váczi, G. s. Boldogh, I.
- Valiček, L. s. Šmid, B.
- Watanabe, M. s. Sato, M.
- Webster, R. G. s. Sazonov, A. A.
- Westaway, E. G., McKimm, Jennifer L., McLeod, Leonie G.: Heterogeneity Among Flavivirus Proteins Separated in Slab Gels. 305.
- Wolstenholme, J., Woodward, C. G., Burgoyne, R. D., Stephen, J.: Vaccinia Virus Cytotoxin. 25.
- Woode, G. N. s. Thouless, M. E.
- Woodward, C. G. s. Wolstenholme, J.
- Würtele, A. s. Schmitz, H.
- Yoshida, H. s. Sato, M.
- Yoshizawa, H. s. Morita, M.
- Zalan, E. s. Blaskovic, P.
- Zhdanov, V. M. s. Parfanovich, M. I.
- Zherebtsova, E. N. s. Skuratovskaya, I. N.